NAVAL AIR SYSTEMS COMMAND

P-3 AFB 357 – INSPECTION DATA PACKAGE

APPENDIX H – HORIZONTAL STABILIZER F.S. 1221 AFT UPPER SPAR CAP RADIUS INSPECTION

Reviewed by:

Anthony P. Petrizzo
Aerospace Engineer
NADEP JAX, Code P3-FST-4

Prepared by:

Stephen P. McClure
Sustainment Engineer
NADEP JAX, Code P3-FST-4

Reviewed by:

Paul Kenny
Level III NDI Engineer
NADEP JAX, Code 4.3.4.3

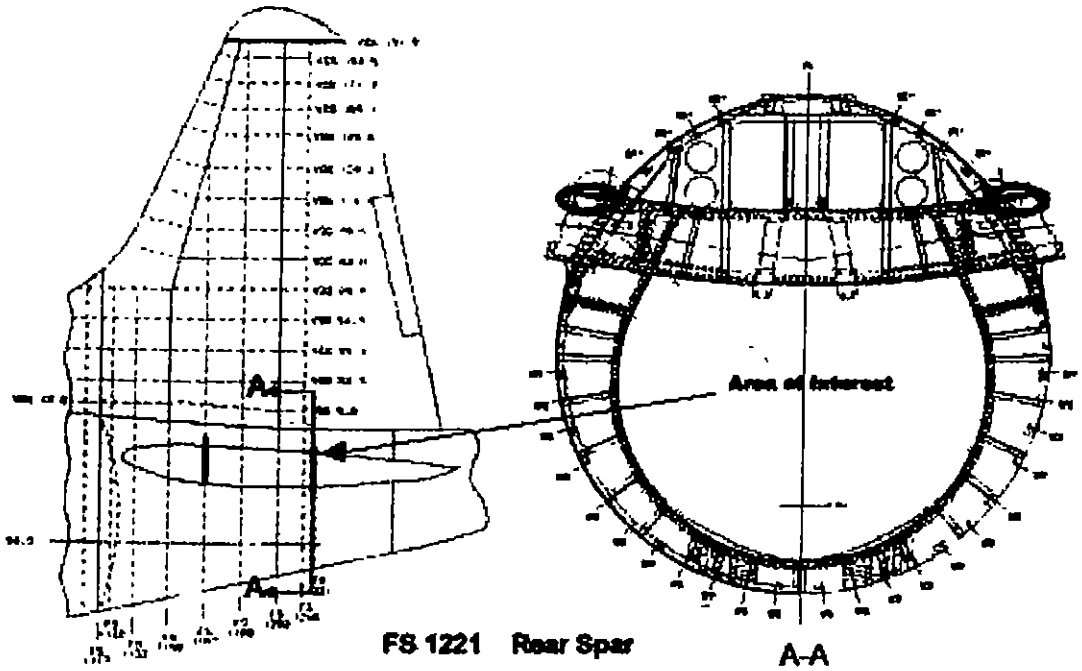
Approved by:

Bob Livingston
P-3 Team Lead
NADEP JAX, Code P3-FST

AFB 357 IDP Appendix H CHANGE SHEET

CHANGE NO.	DATE	INCORPORATED BY	INCORPORATED DATE
Basic	30 Mar 04	Stephen McClure	

Horizontal Stabilizer F.S. 1221 Aft Upper Spar Cap Radius Inspection



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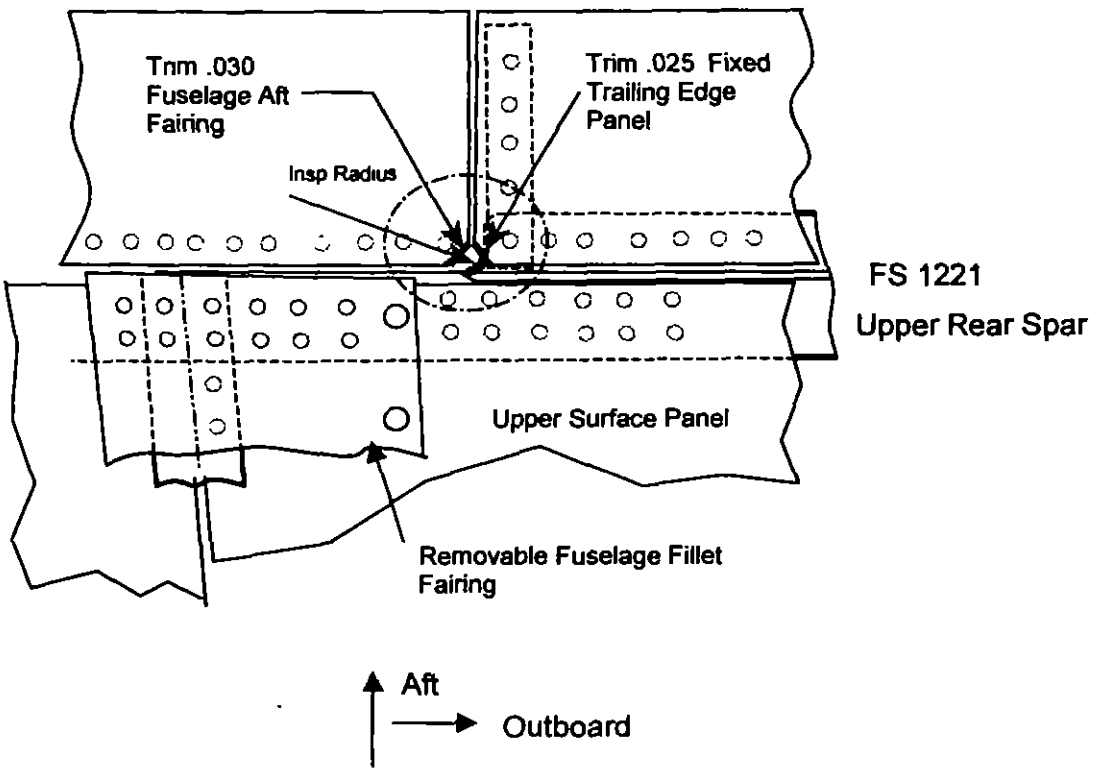

Detail B

MATERIAL REQUIREMENTS

1.1 Material for chemical stripping and required protective equipment is listed in NA 01-1A-509.

1.2 If a repair is required for spar cap damage, material for repair of spar cap cracks/corrosion will be furnished by depot field team as directed by P3 FST Engineering. Damage will be repaired in accordance with NA 01-75PAA-3-1, 3-2, and/or applicable Engineering Directive as appropriate.

2. NDI EQUIPMENT REQUIREMENTS

Note: NDI equipment will be provided by depot.

2.1 NORTEC 2000 eddy current instrument or equivalent.

2.2 NRK-3AL aluminum reference standard from NRK-3AST or equivalent (0.020" surface notch required).

2.3 ML/500KHz 1MHz/A/90.5/6 probe or equivalent.

2.4 9122083.01 cable or equivalent.

3. DETAILED INSTRUCTIONS

3.1 Remove fillet fairing, P/N 900703-5/6.

3.2 Insert steel shim between aft fuselage fairing, P/N 917183-5/6, fixed trailing edge panel, P/N 907992-5/6, and aft upper spar cap, P/N 901187-103/104 to protect spar cap during trimming operation.

3.3 Trim corner of aft fuselage fairing .3 x .3 inch and corner of the fixed trailing edge .2 x .2 inch to reveal the radius of the aft upper spar cap.

3.4 Strip radius area of the spar cap of paint and sealant in accordance with NA 01-1A-509.

3.5 Eddy current surface scan radius of aft upper spar cap for cracks in accordance with the following procedure:

3.5.1 **SETUP**

3.5.1.1 Connect probe to adapter. Turn instrument on and warm up per manufacturer's specifications.

3.5.1.2 Adjust instrument to the following initial settings.

NORTEC 2000:	FREQ	500 KHZ
	ANGLE	HORIZONTAL LIFT-OFF
		GAIN AS NEEDED FOR CALIBRATION (INCLUDING H AND V GAINS)

Note: Any eddy current system capable of calibrating per the following is acceptable as equivalent.

3.5.2 **CALIBRATION**

3.5.2.1 Adjust angle so lift-off is horizontal and to the left.

3.5.2.2 Adjust gain(s) so the vertical component from the 0.020 notch is a 2-unit vertical deflection.

3.5.2.3 Adjust as necessary for horizontal lift-off on the inspected part.

3.5.3 **INSPECTION**

3.5.3.1 Inspect radius area of the aft upper spar cap. Maintain proper orientation by monitoring lift-off.

3.5.3.2 Reject for any vertical deflection of 1 unit or greater not associated with lift-off or other non-relevant geometric effects.

3.5.3.3 Visually re-inspect rejected areas for scratches, gouges, corrosion, cracks, etc. Ensure all primer is removed by non-abrasive methods.

3.5.3.4 Failed surfaces shall be re-inspected and rejectable indications verified.

3.6 All cracks and related structural discrepancies (e.g. corrosion, gouges) must be repaired. Repair in accordance with NA 01-75PAA-3-1, 3-2, and/or applicable Engineering Directive as appropriate.

3.7 Conversion coat, prime and paint stripped and trimmed areas in accordance with NA 01-1A-509.